1. A method of focusing a scanning electron microscope, comprising:

providing a magnetic lens, an image detector, and a wafer holder;

providing means for adjusting the position of said wafer holder;

providing means for supplying a focus current to said magnetic lens;

providing means for supplying a retarding voltage to said wafer holder;

placing a wafer on said wafer holder;

adjusting the position of said wafer holder, thereby adjusting the distance between the wafer placed on said wafer holder and said magnetic lens to a desired focus distance;

adjusting the retarding voltage supplied to said wafer holder to achieve a best focus image of the wafer placed on said wafer holder at said image detector, after adjusting the distance between the wafer placed on said wafer holder and said magnetic lens to said desired focus distance; and

adjusting said focus current to achieve a final focus image of the wafer placed on said wafer holder at said image detector, after adjusting the retarding voltage supplied to said wafer holder.

2. The method of claim 1 wherein said adjusting the distance between said wafer placed on said wafer holder and said magnetic lens to said desired focus distance comprises the use of a LASER and a LASER intensity control unit.

3. The method of claim 1 wherein said means for adjusting the position of said wafer holder comprises the use of a piezoelectric actuator.

4. The method of claim 1 wherein said means for adjusting the distance between said wafer placed on said wafer holder and said magnetic lens comprises a position feedback system.

5. The method of claim 4 wherein said position feedback system communicates with a LASER intensity control unit and said means for adjusting the position of said wafer holder.

6. The method of claim 4 wherein said position feedback system comprises a computer.

7. The method of claim 1 wherein said means for supplying a focus current to said magnetic lens comprises a magnetic lens current control unit and a focus feedback system.

8. The method of claim 7 wherein said focus feedback system communicates with said image detector and said magnetic lens.

9. The method of claim 7 wherein said focus feedback system comprises a computer.

10. The method of claim 1 wherein said means for supplying a retarding voltage to said wafer holder comprises a retarding voltage control unit and a retarding voltage feedback system.

11. The method of claim 10 wherein said retarding voltage feedback system communicates with said image detector and said retarding voltage control unit.

12. The method of claim 10 wherein said retarding voltage feedback system comprises a computer.

13. The method of claim 1 wherein the amount of said retarding voltage supplied to said wafer holder is determined automatically.

14. The method of claim 1 wherein the amount of said focus current supplied to said magnetic lens is determined automatically.

15. The method of claim 1 wherein the position of said wafer holder is determined automatically.

16. An apparatus for focusing a scanning electron microscope, comprising:

a magnetic lens, an image detector, and a wafer holder;

means for adjusting the distance between a wafer placed on said wafer holder and said magnetic lens to a desired focus distance;

a retarding voltage supplied to said wafer holder, wherein said retarding voltage supplied to said wafer holder is adjusted to achieve a best focus image of the wafer placed on said wafer holder at said image detector, after adjusting the distance between the wafer placed on said wafer holder and said magnetic lens; and

a focus current supplied to said magnetic lens, wherein said focus current is adjusted to achieve a final focus image, of the wafer placed on said wafer holder, at said image detector after adjusting the retarding voltage supplied to said wafer holder.

17. The apparatus of claim 16 wherein said means for adjusting the distance between the wafer placed on said wafer holder and said magnetic lens comprises a LASER and a LASER intensity control unit.

18. The apparatus of claim 16 wherein said means for adjusting the distance between the wafer placed on said wafer holder and said magnetic lens comprises a piezoelectric actuator connected to said wafer holder.

19. The apparatus of claim 16 wherein said means for adjusting the distance between the wafer placed on said wafer holder and said magnetic lens comprises a position feedback system.

20. The apparatus of claim 19 wherein said position feedback system communicates with a LASER intensity control unit and said means for adjusting the distance between the wafer placed on said wafer holder and said magnetic lens.

21. The apparatus of claim 19 wherein said position feedback system comprises a computer.

22. The apparatus of claim 16 wherein said focus current supplied to said magnetic lens is adjusted using a magnetic lens current control unit and a focus feedback system.

23. The apparatus of claim 22 wherein said focus feedback system communicates with said image detector and said magnetic lens.

24. The apparatus of claim 22 wherein said focus feedback system comprises a computer.

25. The apparatus of claim 16 wherein said retarding voltage supplied to said wafer holder is adjusted using a retarding voltage control unit and a retarding voltage feedback system.

26. The apparatus of claim 25 wherein said retarding voltage feedback system communicates with said image detector and said retarding voltage control unit.

27. The apparatus of claim 25 wherein said retarding voltage feedback system comprises a computer.

28. The apparatus of claim 16 wherein the amount of said retarding voltage supplied to said wafer holder is determined automatically.

29. The apparatus of claim 16 wherein the amount of said focus current supplied to said magnetic lens is determined automatically.

30. The apparatus of claim 16 wherein the distance between the wafer placed on said wafer holder and said magnetic lens is adjusted automatically.